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## SEQUENCE LISTING

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Koichiro KOMAI

<120> RHEUMATOID ARTHRITIS GENE AND METHOD FOR DIAGNOSING RHEUMATOID ARTHRITIS

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<141> 2001-10-30

<150> PCT/JP00/01697  
<151> 1999-10-23

<150> JP11-116933  
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<170> PatentIn Ver. 2.1

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Ser Arg Thr Phe Lys Met His Lys Leu Leu Gln Gln Ala Arg Gln Cys			
325	330	335	
tgt gat gaa ggg gaa tgt ctt cta gct aat cag gaa ata gat aag ttt	1233		
Cys Asp Glu Gly Glu Cys Leu Leu Ala Asn Gln Glu Ile Asp Lys Phe			
340	345	350	
cag tct aaa gaa gat gct cag aaa gct ctc caa gac att gaa aat ttt	1281		
Gln Ser Lys Glu Asp Ala Gln Lys Ala Leu Gln Asp Ile Glu Asn Phe			
355	360	365	
ctt gaa atg gct cta ccc ttt ata aat tat gaa cct gaa aca ctg cag	1329		
Leu Glu Met Ala Leu Pro Phe Ile Asn Tyr Glu Pro Glu Thr Leu Gln			
370	375	380	385
tat gaa ttt gat gta ata tta tct cct gag ctt aag gtt caa atg aag	1377		
Tyr Glu Phe Asp Val Ile Leu Ser Pro Glu Leu Lys Val Gln Met Lys			
390	395	400	
act ata caa ctc aag ctt gaa aac att cga agt ata ttt gag aac cag	1425		
Thr Ile Gln Leu Lys Leu Glu Asn Ile Arg Ser Ile Phe Glu Asn Gln			
405	410	415	
cag gct ggt ttc agg aac ctg gca gat aag cat gtg agg cca atc caa	1473		
Gln Ala Gly Phe Arg Asn Leu Ala Asp Lys His Val Arg Pro Ile Gln			
420	425	430	
ttt gtg gta ccc aca cct gaa aat ttg gtc aca tct ggg aca cca ttt	1521		
Phe Val Val Pro Thr Pro Glu Asn Leu Val Thr Ser Gly Thr Pro Phe			
435	440	445	
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Phe Ser Ser Lys Gln Gly Lys Thr Trp Arg Gln Asn Gln Ser Asn			
450	455	460	465
tta aaa att gaa gtg gtg cct gat tgt cag gag aag aga agt tct ggt	1617		
Leu Lys Ile Glu Val Val Pro Asp Cys Gln Glu Lys Arg Ser Ser Gly			
470	475	480	
cca tcc tcc agt ttg gac aat ggc aat agc ttg gat gtt tta aag aac	1665		
Pro Ser Ser Leu Asp Asn Gly Asn Ser Leu Asp Val Leu Lys Asn			
485	490	495	
cac gta cta aat gaa ctg ata cag act gag aga gtt tat gtt cga gaa	1713		
His Val Leu Asn Glu Leu Ile Gln Thr Glu Arg Val Tyr Val Arg Glu			
500	505	510	
ctg tat act gtt ttg ttg ggt tat aga gcg gag atg gat aat cca gag	1761		
Leu Tyr Thr Val Leu Leu Gly Tyr Arg Ala Glu Met Asp Asn Pro Glu			
515	520	525	
atg ttt gat ctt atg cca cct ctc ctg aga aat aaa aag gac att ctc	1809		
Met Phe Asp Leu Met Pro Pro Leu Leu Arg Asn Lys Lys Asp Ile Leu			

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agc agc ctg gaa aat tgt gct cat gct cca gaa aga gtg gga cct tgt Ser Ser Leu Glu Asn Cys Ala His Ala Pro Glu Arg Val Gly Pro Cys 565	570	575		1905
ttc ctg gaa agg aag gat gat ttt cag atg tat gca aaa tat tgt cag Phe Leu Glu Arg Lys Asp Asp Phe Gln Met Tyr Ala Lys Tyr Cys Gln 580	585	590		1953
aat aag ccc aga tca gaa aca att tgg agg aag tat tca gaa tgc gca Asn Lys Pro Arg Ser Glu Thr Ile Trp Arg Lys Tyr Ser Glu Cys Ala 595	600	605		2001
ttt ttc cag gaa tgt caa aga aag tta aaa cac aga ctt aga ctg gat Phe Phe Gln Glu Cys Gln Arg Lys Leu Lys His Arg Leu Arg Leu Asp 610	615	620		2049
tcc tat tta ctc aaa cca gtg caa cga atc act aaa tat cag tta ttg Ser Tyr Leu Leu Lys Pro Val Gln Arg Ile Thr Lys Tyr Gln Leu Leu 630	635	640		2097
ttg aag gag cta tta aaa tat agc aaa gac tgt gaa ggt tct gct ctg Leu Lys Glu Leu Lys Tyr Ser Lys Asp Cys Glu Gly Ser Ala Leu 645	650	655		2145
ttg aag aag gca ctc gat gca atg ctg gat tta ctg aag tca gtt aat Leu Lys Lys Ala Leu Asp Ala Met Leu Asp Leu Leu Lys Ser Val Asn 660	665	670		2193
gat tct atg cat cag att gca ata aat ggc tat att gga aac tta aat Asp Ser Met His Gln Ile Ala Ile Asn Gly Tyr Ile Gly Asn Leu Asn 675	680	685		2241
gaa ctg ggc aag atg ata atg caa ggt gga ttc agc gtt tgg ata ggg Glu Leu Gly Lys Met Ile Met Gln Gly Gly Phe Ser Val Trp Ile Gly 690	695	700		2289
cac aag aaa ggt gct aca aaa atg aag gat ttg gct aga ttc aaa cca His Lys Lys Gly Ala Thr Lys Met Lys Asp Leu Ala Arg Phe Lys Pro 710	715	720		2337
atg cag cga cac ctt ttc ttg tat gaa aaa gcc att gtt ttt tgc aaa Met Gln Arg His Leu Phe Leu Tyr Glu Lys Ala Ile Val Phe Cys Lys 725	730	735		2385
agg cgt gtt gaa agt gga gaa ggc tct gac aga tac ccg tca tac agt Arg Arg Val Glu Ser Gly Glu Gly Ser Asp Arg Tyr Pro Ser Tyr Ser 740	745	750		2433
ttt aaa cac tgt tgg aaa atg gat gaa gtt gga atc act gaa tat gta Phe Lys His Cys Trp Lys Met Asp Glu Val Gly Ile Thr Glu Tyr Val 755	760	765		2481

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Lys Gly Asp Asn Arg Lys Phe Glu Ile Trp Tyr Gly Glu Lys Glu Glu	
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gtt tat att gtc cag gct tct aat gta gat gtg aag atg acg tgg cta	2577
Val Tyr Ile Val Gln Ala Ser Asn Val Asp Val Lys Met Thr Trp Leu	
790                   795                   800	
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805                   810                   815	
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Lys Lys Arg Lys Gln Gln Asp Gln Leu Thr Glu Arg Asp Lys Phe Gln	
820                   825                   830	
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Ile Ser Leu Gln Gln Asn Asp Glu Lys Gln Gln Gly Ala Phe Ile Ser	
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act gag gaa act gaa ttg gaa cac acc agc act gtg gtg gag gtc tgt	2769
Thr Glu Glu Thr Glu Leu Glu His Thr Ser Thr Val Val Glu Val Cys	
850                   855                   860                   865	
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Glu Ala Ile Ala Ser Val Gln Ala Glu Ala Asn Thr Val Trp Thr Glu	
870                   875                   880	
gca tca caa tct gta gaa atc tct gaa gaa cct gcg gaa tgg tca agc	2865
Ala Ser Gln Ser Val Glu Ile Ser Glu Glu Pro Ala Glu Trp Ser Ser	
885                   890                   895	
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Asn Tyr Phe Tyr Pro Thr Tyr Asp Glu Asn Glu Glu Asn Arg Pro	
900                   905                   910	
ctc atg aga cct gtg tcg gag atg gct ctc cta tat tga tgaagctact	2962
Leu Met Arg Pro Val Ser Glu Met Ala Leu Leu Tyr	
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Thr Ser Phe Leu Gln Arg Thr Phe Thr Asp Ile Gly Phe Trp Phe Ser  
35 40 45  
Gln Glu Asp Phe Met Pro Lys Leu Pro Val Val Met Leu Ser Ser Val  
50 55 60  
Ser Asp Leu Leu Thr Tyr Ile Asp Asp Lys Gln Leu Thr Pro Glu Leu  
65 70 75 80  
Gly Gly Thr Leu Gln Tyr Cys His Ser Glu Trp Ile Ile Phe Arg Asn  
85 90 95  
Ala Ile Glu Asn Phe Ala Leu Thr Val Lys Glu Met Ala Gln Met Leu  
100 105 110  
Gln Ser Phe Gly Thr Glu Leu Ala Glu Thr Glu Leu Pro Asp Asp Ile  
115 120 125  
Pro Ser Ile Glu Glu Ile Leu Ala Ile Arg Ala Glu Arg Tyr His Leu  
130 135 140  
Leu Lys Asn Asp Ile Thr Ala Val Thr Lys Glu Gly Lys Ile Leu Leu  
145 150 155 160  
Thr Asn Leu Glu Val Pro Asp Thr Glu Gly Ala Val Ser Ser Arg Leu  
165 170 175  
Glu Cys His Arg Gln Ile Ser Gly Asp Trp Gln Thr Ile Asn Lys Leu  
180 185 190  
Leu Thr Gln Val His Asp Met Glu Thr Ala Phe Asp Gly Phe Trp Glu  
195 200 205  
Lys His Gln Leu Lys Met Glu Gln Tyr Leu Gln Leu Trp Lys Phe Glu  
210 215 220

Gln Asp Phe Gln Gln Leu Val Thr Glu Val Glu Phe Leu Leu Asn Gln  
225 230 235 240

Gln Ala Glu Leu Ala Asp Val Thr Gly Thr Ile Ala Gln Val Lys Gln  
245 250 255

Lys Ile Lys Lys Leu Glu Asn Leu Asp Glu Asn Ser Gln Glu Leu Leu  
260 265 270

Ser Lys Ala Gln Phe Val Ile Leu His Gly His Lys Leu Ala Ala Asn  
275 280 285

His His Tyr Ala Leu Asp Leu Ile Cys Gln Arg Cys Asn Glu Leu Arg  
290 295 300

Tyr Leu Ser Asp Ile Leu Val Asn Glu Ile Lys Ala Lys Arg Ile Gln  
305 310 315 320

Leu Ser Arg Thr Phe Lys Met His Lys Leu Leu Gln Gln Ala Arg Gln  
325 330 335

Cys Cys Asp Glu Gly Glu Cys Leu Leu Ala Asn Gln Glu Ile Asp Lys  
340 345 350

Phe Gln Ser Lys Glu Asp Ala Gln Lys Ala Leu Gln Asp Ile Glu Asn  
355 360 365

Phe Leu Glu Met Ala Leu Pro Phe Ile Asn Tyr Glu Pro Glu Thr Leu  
370 375 380

Gln Tyr Glu Phe Asp Val Ile Leu Ser Pro Glu Leu Lys Val Gln Met  
385 390 395 400

Lys Thr Ile Gln Leu Lys Leu Glu Asn Ile Arg Ser Ile Phe Glu Asn  
405 410 415

Gln Gln Ala Gly Phe Arg Asn Leu Ala Asp Lys His Val Arg Pro Ile  
420 425 430

Gln Phe Val Val Pro Thr Pro Glu Asn Leu Val Thr Ser Gly Thr Pro  
435 440 445

Phe Phe Ser Ser Lys Gln Gly Lys Lys Thr Trp Arg Gln Asn Gln Ser  
450 455 460

Asn Leu Lys Ile Glu Val Val Pro Asp Cys Gln Glu Lys Arg Ser Ser  
465 470 475 480

Gly Pro Ser Ser Ser Leu Asp Asn Gly Asn Ser Leu Asp Val Leu Lys  
485 490 495

Asn His Val Leu Asn Glu Leu Ile Gln Thr Glu Arg Val Tyr Val Arg  
500 505 510

Glu Leu Tyr Thr Val Leu Leu Gly Tyr Arg Ala Glu Met Asp Asn Pro  
515 520 525

Glu Met Phe Asp Leu Met Pro Pro Leu Leu Arg Asn Lys Lys Asp Ile  
530 535 540

Leu Phe Gly Asn Met Ala Glu Ile Tyr Glu Phe His Asn Asp Ile Phe  
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Leu Ser Ser Leu Glu Asn Cys Ala His Ala Pro Glu Arg Val Gly Pro  
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Cys Phe Leu Glu Arg Lys Asp Asp Phe Gln Met Tyr Ala Lys Tyr Cys  
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625 630 635 640

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Val Lys Gly Asp Asn Arg Lys Phe Glu Ile Trp Tyr Gly Glu Lys Glu  
770 775 780

Glu Val Tyr Ile Val Gln Ala Ser Asn Val Asp Val Lys Met Thr Trp  
785 790 795 800

Leu Lys Glu Ile Arg Asn Ile Leu Leu Lys Gln Gln Glu Leu Leu Thr  
805 810 815

Val Lys Lys Arg Lys Gln Gln Asp Gln Leu Thr Glu Arg Asp Lys Phe  
820 825 830

Gln Ile Ser Leu Gln Gln Asn Asp Glu Lys Gln Gln Gly Ala Phe Ile  
835                        840                        845

Ser Thr Glu Glu Thr Glu Leu Glu His Thr Ser Thr Val Val Glu Val  
850                        855                        860

Cys Glu Ala Ile Ala Ser Val Gln Ala Glu Ala Asn Thr Val Trp Thr  
865                        870                        875                        880

Glu Ala Ser Gln Ser Ala Glu Ile Ser Glu Glu Pro Ala Glu Trp Ser  
885                        890                        895

Ser Asn Tyr Phe Tyr Pro Thr Tyr Asp Glu Asn Glu Glu Asn Arg  
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Pro Leu Met Arg Pro Val Ser Glu Met Ala Leu Leu Tyr  
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